

IN THE SPECIFICATION:

Please amend the specification as follows:

Please amend the paragraph beginning on Pg. 7, Line 15 as follows:

Fig. 3 depicts a block diagram of an exemplary gateway 436 134 suitable for use in the present invention. In particular, the exemplary gateway 436 134 comprises a processor 302, memory 304, support circuits 306, I/O circuitry 308, and one or more storage devices 310 illustratively coupled via one or more buses 312. Specifically, the processor 302 cooperates with conventional support circuitry 306, such as power supplies, clock circuits, cache memory, and the like, as well as circuits that assist in executing the software routines stored in the memory 304. As such, it is contemplated that some of the process steps discussed herein as software processes may be implemented within hardware, for example, a circuitry that cooperates with the processor 302 to perform various steps.

Please amend the paragraph beginning on Pg. 7, Line 26 as follows:

The memory 304 may be volatile memory, such as DRAM, SRAM, and the like. The storage device 310 may be non-volatile memory such as disc drives, programmable read only memory (PROM) and the like, and the IO circuitry may include various ports that form an interface between the various function elements communicating with the gateway 436 134. For example, in the embodiment of FIG. 1, the gateway 436 134 communicates with the Ethernet switch 132 and the site router 136.

Please amend the paragraph beginning on Pg. 9, Line 18 as follows:

FIG. 5 depicts a flow diagram of a first method for registering an access point (AP) with a gateway (GW) 436 134. The flow chart of FIG. 5 is divided into two columns with the functional aspects of the gateway 436 134 in the left column and the functional aspects of the access point 138 in the right column. The method 500 of FIG. 5 illustrates

how an access point 138 is registered with a gateway 136 134 when a gateway 136 134 is powered up. The method 500 begins at step 501 and proceeds to step 502 where a gateway 136 134 is powered up in the network 100. At step 504, the gateway 136 134 broadcasts a service discovery query to the AP's 138 in the network 100. The method 500 then proceeds to step 506.

Please amend the paragraph beginning on Pg. 9, Line 27 as follows:

At step 506 the AP's 138 in the network 100 receive the broadcasted service discovery query message from the newly powered up gateway 136 134. At step 508 the access point receiving the service discovery query message initiates an AP registration request message to be sent to the gateway 136 134.

Please amend the paragraph beginning on Pg. 10, Line 17 as follows:

The lifetime field 716 comprises one or more bytes that are set to establish a permanent association between the access point 138 and the gateway 136 134, or a temporary association there between. In one embodiment, if the lifetime field is set to all 1's, a permanent association between the access point and gateway is created. Otherwise, the access point 138 is required to refresh the AP/gateway association before the lifetime expires. The lifetime may be set to a time period such as a day or days, week, or otherwise to refresh itself with the gateway. In this later embodiment, the periodic refreshing serves as a heartbeat of the AP 138, such that the health of the AP 138 may be periodically determined.

Please amend the paragraph beginning on Pg. 11, Line 6 as follows:

Since the gateway 136 134 has broadcasted the discovery query to all of the AP's 138 in the network 100, each access point 138 selects a random delay to send a message in order to avoid collisions of the messages from all of the AP's when being sent back to the gateway 136 134. In one embodiment the random delay that is selected is between 0

and 100 milliseconds. Once the random delay is selected by the AP 138, the AP 138 unicasts the AP registration request 700 to the gateway 136 134 that broadcasted the service discovery query.

Please amend the paragraph beginning on Pg. 11, Line 13 as follows:

At step 516, the broadcasting gateway 136 134 receives the AP registration request message from the access point 138 and at step 518, stores the registration information in a database. That is, the gateway 136 134 builds a database of all the AP's that register with it such that the gateway 136 134 can support a hand-off feature when a mobile host 150 roams between one "hot spot" 140 and another "hot spot". The method then proceeds to step 599 where the method 500 ends.

Please amend the paragraph beginning on Pg. 11, Line 20 as follows:

FIGS. 6A and 6B collectively depict a flow diagram of a second method 600 of registering an access point 138 with a gateway 136 134. FIGS. 6A of 6B are divided into two columns where the functional aspects of the gateway 136 134 are shown on the right side, while the functional aspects of the access point 138 are shown on the left side of the FIGS. The method 600 starts at step 601 and proceeds to step 602, where an access point is powered up 602. Specifically, a new access point may be installed in a network 100 or a previously installed access point may be rebooted, for example, to download a new software image, recover from a power failure, and the like. The method 600 then proceeds to step 604. At step 604, the access point broadcasts a gateway query message over the network 100.

Please amend the paragraph beginning on Pg. 11, Line 31 as follows:

At step 606, a gateway 136 134 in the network 100 receives the gateway query message, and at step 608, each of the gateways in the network 100 determines whether the AP that broadcasted the gateway query message is registered. That is, each gateway

checks its database of registered access points to determine whether the broadcasting access point 138 is registered therewith. If at step 610 the broadcasting AP 138 is registered with the gateway, the method 600 proceeds to step 699 where the method 600 ends. If at step 610 the broadcasting AP 138 is not registered at the gateway ~~136 134~~, at step 612 the gateway ~~136 134~~ sends a unicast service discovery message to the broadcasting AP 138. That is, each gateway in the network 100 that does not contain a record of the broadcasting AP as being a registered AP therewith, then sends a unicast service discovery message to that broadcasting AP. The method 600 then proceeds to step 614.

Please amend the paragraph beginning on Pg. 12, Line 11 as follows:

At step 614, the broadcasting AP 138 receives at least one service discovery message (SDM) from the gateways ~~136 134~~ that do not have the broadcasting AP registered. At step 616, the AP 138 determines whether the number of SDMs is greater than one. In other words, the access point determines whether it has received more than one service discovery message. If the number of SDMs the broadcasting AP receives is not greater than one, then the method 600 proceeds to step 620 where the AP initiates an AP registration request message to the gateway. If however, the number of SDMs is greater than one, then the method 600 proceeds to step 618, where the access point 138 selects an appropriate gateway for registration. Determining factors for selecting an appropriate gateway include costs of using the gateway, load at each gateway, system features provided by each gateway, and the like. The method 600 then proceeds to 620, where the AP 138 initiates an AP registration request message to the selected gateway. The method then proceeds to step 622.